

Remarks

Claims 1-28 and 41-56 currently remain pending. Claims 1-12, 14, 15, 18-20, 22-28, 41-50 and 52-55 stand rejected. Claims 13, 16, 17, 21 and 51 stand objected to. Claim 56 is allowed. No claims are amended herein. The Assignee respectfully requests reconsideration of the rejections and objections, and requests allowance of claims 1-28 and 41-56.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-10, 23-28, 41-48 and 55 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,694,414 to Smith et al. (hereinafter “Smith”). (Page 2 of the final Office action.) As a basis of discussion, independent system claim 1 is reproduced below in its entirety:

1. A system for selecting spectrum comprising:
 - a licensed spectrum transceiver configured to communicate over licensed spectrum;
 - an unlicensed spectrum transceiver configured to communicate over unlicensed spectrum; and
 - a spectrum selector configured to select the licensed transceiver or the unlicensed transceiver for communication.

Independent method claim 41 incorporates similar provisions.

The Office action alleges that Smith teaches each of these provisions. (Pages 2 and 7-9 of the final Office action.) The Assignee respectfully traverses the rejection in light of the following discussion.

Licensed and Unlicensed Spectrum Transceivers

The final Office action indicates that the transmitter (Fig. 2) and the receiver (Fig. 3) of Smith, with further reference to Figs. 8-10, and column 3, lines 8-18, anticipate the licensed spectrum transceiver and the unlicensed spectrum transceiver of claim 1. The Assignee respectfully disagrees.

Generally, Smith discloses a *dual-mode* transmitter (Fig. 2) and a *dual-mode* receiver (Fig. 3). (See also column 6, lines 23-35; and column 7, lines 14-35.) The transmitter and

receiver are “dual-mode” in the sense that each may be operated in either a “cellular” (i.e., narrowband) mode, or a “microcellular” (i.e., spread-spectrum) mode. (Column 5, lines 50-67.)

Such a receiver and transmitter are distinguished from the licensed spectrum transceiver and the unlicensed spectrum transceiver of claims 1 and 41. Each of the transmitter and receiver of Smith only provide for a *single* transmitter or receiver capable of *switching* between narrowband and spread-spectrum modes, not *two separate transceivers*, as provided for in claims 1 and 41. (See again Figs. 2 and 3; column 6, lines 23-25; and column 7, lines 14 and 15.) Due to this limitation, the Smith transmitter and receiver can only communicate in *either* narrowband *or* spread-spectrum mode *at any particular point in time*. (See, for example, column 6, lines 47-51; and column 8, lines 9-14.) Thus, Smith does not disclose *two separate transceivers*, each configured to communicate over *separate spectra*, as provided for in claims 1 and 41: “a licensed spectrum transceiver *configured to communicate over licensed spectrum*,” and “an unlicensed spectrum transceiver *configured to communicate over unlicensed spectrum*.” (Emphasis supplied.)

In its Response to Arguments, the final Office action argues that since the dual-mode transmitter of Fig. 2 and the dual-mode receiver of Fig. 3 of Smith are integrated in a single telephone handset 410 of Fig. 8, the “telephone handset 410 performs transceiver’s functions.” (Page 8 of the final Office action.) However, whether the handset 410 performs transceiver *functions* is relatively unimportant in the context of claims 1 and 41. In judging patentability, the true issue is whether the *structure* recited in these claims is taught or suggested in Smith. As stated above, Smith, by its own language, explicitly teaches a dual-mode transmitter and a dual-mode receiver. Combining these two structures within a single telephone handset 410 yields at most *one dual-mode transceiver*, not a licensed spectrum transceiver and an unlicensed spectrum transceiver.

The Response to Arguments further indicates that Smith, by virtue of its narrowband modulator 113, narrowband demodulator 213, spread spectrum modulator 111 and spread spectrum despreader 215, discloses both an unlicensed spectrum transceiver and a licensed spectrum transceiver. “Thus, telephone handset 410 comprises *two separate transceivers*: licensed transceiver and unlicensed transceiver.” (Page 8 of the final Office action.) The Assignee respectfully disagrees. For example, for Smith to disclose two separate transceivers as provided for in claims 1 and 41 of the present application, narrowband modulator 113 and spread

spectrum modulator 111 must reside in separate transmitters, one for each of two separate transceivers. However, Smith makes clear that they reside within *one dual-mode transmitter*. (See, for example, column 6, lines 23 and 24.) Moreover, Fig. 2 indicates that the narrowband modulator 113 and the spread spectrum modulator 111 *share* an RF power amplifier 115 and an adjustable bandpass filter 117, both of which Smith indicates are necessary to transmit the narrowband and spread spectrum signals. (Column 6, line 63, to column 7, line 13.) Thus, the narrowband modulator 113 and spread spectrum modulator 111 do not represent separate transmitters, but instead reside within the single transmitter of Fig. 2, and hence within at most a single transceiver. Similarly, narrowband demodulator 213 and spread spectrum despreader 215 of Smith, which share the tunable bandpass filter 117, preamplifier 203 and frequency converter 209 of Fig. 3, reside within a single receiver, and thus within at most a single transceiver.

Spectrum Selector

The final Office action also indicates that the mode controller 103 of the Smith transmitter and receiver anticipates the spectrum selector of claim 1 and 41, which is “configured to select the licensed transceiver or the unlicensed transceiver for communication.” (Page 2 of the final Office action.) However, according to Smith, the mode controller 103 selects between narrowband and spread-spectrum *modes* in both the transmitter and receiver. (Column 6, lines 47-55; and column 7, lines 37-50.) Thus, the mode controller 103 is not configured to select a licensed *transceiver* or an unlicensed *transceiver*, as set forth in claims 1 and 41.

In the Response to Arguments, the final Office action indicates that the mode controller 103, via the mode select switch 104, directs an information signal to either the narrowband modulator 113 or the spread spectrum modulator 111, and selects reception of narrowband or spread spectrum modulation. (Page 9 of the final Office action.) However, as stated above, the mode controller 103 does not select one transceiver or another, as provided for in claims 1 and 41, since the modulators 111, 113 belong to the same transmitter, and the demodulator 213 and despreader 215 reside within a single receiver. Instead, the mode controller 103 alters the mode in which the transmitter and receiver operate, as mandated by the apparatuses disclosed in Smith.

Thus, on the basis of the foregoing, the Assignee respectfully asserts that independent claims 1 and 41 are allowable in view of Smith, and such indication is respectfully requested.

Also, claims 2-10 and 23-28 depend from independent claim 1, and claims 42-48 and 55 depend from independent claim 41, thus incorporating the provisions of their associated independent claims. Thus, the Assignee contends that claims 2-10, 23-28, 42-48 and 55 are allowable for at least the reasons provided above in support of claims 1 and 41, and such indication is respectfully requested.

Therefore, in light of the discussion presented above, the Assignee respectfully requests withdrawal of the 35 U.S.C. § 102 rejection of claims 1-10, 23-28, 41-48 and 55.

Claim Rejections Under 35 U.S.C. § 103

Claims 11, 12 and 49 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of U.S. Patent No. 6,873,607 to Hamada et al. (Page 5 of the final Office action.)

Also, claims 14, 15 and 50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of U.S. Patent No. 6,970,824 to Shibutani. (Page 5 of the final Office action.)

Claims 18-20, 52 and 53 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of U.S. Patent No. 6,892,068 to Karabinis et al. (Page 6 of the final Office action.)

Finally, claims 22 and 54 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of U.S. Patent No. 6,952,434 to Jagannatharao et al. (Page 7 of the final Office action.) The Assignee respectfully traverses these rejections based on the discussion set forth above.

More specifically, claims 11, 12, 14, 15, 18-20 and 22 depend from independent claim 1, and claims 49, 50 and 52-54 depend from independent claim 41, thus incorporating the provisions of their associated independent claims. Thus, the Assignee asserts that claims 11, 12, 14, 15, 18-20, 22, 49, 50 and 52-54 are allowable for at least the reasons presented above in support of claims 1 and 41, and such indication is respectfully requested.

Thus, the Assignee respectfully requests that the 35 U.S.C. § 103 rejections of claims 11, 12, 14, 15, 18-20, 22, 49, 50 and 52-54 be withdrawn.

Indication of Allowable Subject Matter

The Office action indicates that claims 13, 16, 17, 21 and 51 stand “objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” (Page 9 of the

final Office action.) The Assignee thanks the Examiner for his consideration of these claims. However, claims 13, 16, 17 and 21 depend from independent claim 1, and claim 51 depends from independent claim 41, thus incorporating the provisions of their independent claims. Therefore, the Assignee asserts that claims 13, 16, 17, 21 and 51 are allowable in their present form for at least the reasons provided above for claims 1 and 41, and such indication is respectfully requested.

Thus, in light of the above discussion, the Assignee respectfully requests withdrawal of the objection to claim 13, 16, 17, 21 and 51.

Also according to the Office action, claim 56 is allowed in its present form. (Page 9 of the final Office action.) The Assignee thanks the Examiner for his consideration of that claim.

Conclusion

Based upon the above remarks, the Assignee submits that claims 1-28 and 41-56 are allowable. Additional reasons in support of patentability exist, but such reasons are omitted in the interest of clarity and brevity. The Assignee thus respectfully requests allowance of claims 1-28 and 41-56.

The Assignee believes no additional fees are due with respect to this filing. However, should the Office determine additional fees are necessary, the Office is hereby authorized to charge Deposit Account No. 21-0765 accordingly.

Respectfully submitted,

Date: 7/28/06



SIGNATURE OF PRACTITIONER
Kyle J. Way, Reg. No. 45,549
Setter Roche LLP
Telephone: (720) 562-2283
E-mail: kyle@setterroche.com

Correspondence address:

CUSTOMER NO. 28004

Attn: Harley R. Ball
6391 Sprint Parkway
Mailstop: KSOPHT0101-Z2100
Overland Park, KS 66251-2100